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#### REMARKS

The Applicants appreciate the thorough examination of the present application that is reflected in the Office Actions of September 8, 2004, March 28, 2005, January 20, 2006, and June 20, 2006. In the following remarks, the Office Action of June 20, 2006 will be referred to as "the Office Action." In response, the Applicants have amended Claims 25, 48, and 50, and the Applicants will show in the following remarks that all claims are patentable over the cited art.

Reconsideration of the outstanding rejections and allowance of all claims is thus respectfully requested.

### Consideration of Applicants' IDS Is Respectfully Requested

The Applicants respectfully request consideration of the Information Disclosure Statement (IDS) filed on March 10, 2006, a copy of which is attached. More particularly, the Applicants have attached a copy of the IDS and Form PTO-1449 printed from the U.S. Patent Office Public PAIRS system, and the IDS and Form PTO-1449 are both stamped as having been received by the U.S. Patent Office on March 13, 2006 (before the Final Office Action). As all requirements of 37 C.F.R. Sec. 1.97 and 1.98 have been met with respect to this IDS, consideration thereof is respectfully requested in due course.

#### All Double Patenting Rejections Have Been Overcome

Claim 25 has been rejected under the judicially created doctrine of double patenting over U.S. Patent No. 6,745,241 (the '241 patent). In particular, the Office Action states that:

Although the limitations of claim 25 and the disclosure are not identical, they are not patentably distinct from each other because the present claimed invention is somewhat a different recitation of Patent 6,745,214. There is a species/genus relationship between the limitation of claim 28 and the disclosure of '241.

Claim 25 is obvious over the teachings of '241 (col. 12, lines 27-33) because this system would allow load balancing across a network. (Underline added.)

Office Action, page 3.

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The Applicants respectfully submit that the double patenting rejection of Claim 25 is improper because the Office Action is rejecting Claim 25 based on the disclosure of the '241 patent as opposed to the claims of the '241 patent as required by Section 804 of the Manual Of Patent Examining Procedure (MPEP). In particular, the MPEP states that:

Any obviousness-type double patenting rejection should make clear:

- (A) The differences between the inventions defined by the conflicting claims a claim in the patent compared to a claim in the application; and
- (B) The reasons why a person of ordinary skill in the art would conclude that the invention defined in the claim \*\*>at issue would have been< an obvious variation of the invention defined in a claim in the patent.

When considering whether the invention defined in a claim of an application \*>would have been< an obvious variation of the invention defined in the claim of a patent, the disclosure of the patent may not be used as prior art. >General Foods Corp. v. Studiengesellschaft Kohle mbH, 972 F.2d 1272, 1279, 23 USPQ2d 1839, 1846 (Fed. Cir. 1992). (Underline and bold added.)

MPEP Sec. 804(II)(B). Moreover:

... a double patenting rejection <u>must rely on a comparison with the claims in an issued or to be issued patent</u>.... (Underline and bold added.)

MPEP, Sec. 804(III).

The Office Action has thus not established a double patenting rejection because the Office Action has relied on the disclosure of the '241 patent as opposed to the claims of the '241 patent as required by the MPEP. Withdrawal of the double patenting rejection is thus respectfully requested.

The Applicants note that the Office Action seems to imply that the Applicants have admitted a prior double patenting rejection. In particular, the Office Action states that "based on Applicant's admission of the double patenting rejection...." Office Action, page 2. While the Applicants previously rewrote Claim 28 in dependent form to reduce issues for further consideration, this amendment should not be construed as an admission with respect to the double patenting rejection from the Office Action of January 20, 2006. In particular, the double patenting rejection from the Office Action of January 20, 2006, is improper for the reasons

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discussed above with respect to the double patenting rejection from the Office Action of June 20, 2006.

### Independent Claims 25, 48, And 50 Are Patentable Over Chen

Claims 25, 48, and 50 have been rejected under 35 U.S.C. Sec. 102(e) as being anticipated by U.S. Patent No. 6,553,423 to Chen ("Chen"). The Applicant respectfully submits, however, that Claims 25, 48, and 50 are patentable over Chen for at least the reasons discussed below.

Claim 25, for example, recites a method of dynamically undeploying services in a computing network. As amended, the method of Claim 25 includes:

receiving an undeployment trigger for a selected service;

responsive to receiving the undeployment trigger, determining one or more network locations where the selected service is deployed; and

responsive to receiving the undeployment trigger, effecting a dynamic undeployment by programmatically removing the selected service from one or more selected ones of the network locations;

wherein services comprise web services;

wherein receiving an undeployment trigger comprises receiving an undeployment trigger for a selected web service in the computing network;

wherein determining one or more network locations comprises determining one or more network locations where the selected web service is deployed in the computing network; and

wherein effecting a dynamic undeployment comprises effecting a dynamic undeployment by programmatically removing the selected web service from one or more selected ones of the network locations in the computing network.

The Applicants respectfully submit that Chen fails to teach or suggest many of the recitations of Claim 25. In support of the rejection, the Office Action states that Chen teaches "receiving an undeployment trigger for a selected service; (See col. 5, lines 20-30)." The cited portions of Chen, however, state that:

After a TCP connection is established the first message sent by the neighboring peer routers is an OPEN message. As noted, the <u>OPEN message data structure provides a means for the routers to identify themselves at the beginning of the neighboring relationship</u>. The OPEN message includes, inter alia, an optional parameters field that

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contains <u>a list of optional parameters specified by the peer routers</u>. One optional parameter that is defined within the optional parameter field is <u>a capabilities parameter used to introduce new features that may be supported by a peer router</u>. (Underline added.)

Chen, col. 5, lines 20-30. Chen thus discusses an "OPEN message" including "a list of optional parameters" such as "a capabilities parameter used to introduce new features...." (Underline added.) Accordingly, Chen fails to teach or suggest receiving an "undeployment trigger" as recited in Claim 25, and in fact, the OPEN message of Chen including a list of optional parameters teaches away from the undeployment trigger of Claim 25.

Chen also fails to teach or suggest determining one or more network locations where the selected service is deployed. In support of the rejection, the Office Action cites Col. 5, lines 7-24 of Chen stating that "once the paths are calculated it follows then that determining network locations is inherent." Office Action, page 4. In particular, cited portions of Chen state that:

[T]he internetwork layer 606 concerns the protocol and algorithms that interdomain routers utilize so that they can cooperate to calculate paths through the computer network 400. An interdomain routing protocol ... is used to perform interdomain routing through the computer network. The interdomain routers (hereinafter "neighboring peer routers") exchange routing and reachability information among the autonomous systems over a reliable transport layer connection....

After a TCP connection is established the first message sent by the neighboring peer routers is an OPEN message. As noted, the OPEN message data structure provides a means for the routers to identify themselves at the beginning of the neighboring relationship.

Chen, col. 5, lines 7-24. Chen thus relates to an OPEN message that is sent by neighboring peer routers after a TCP connection is established. Nothing in Chen, however, teaches or suggests determining one or more locations where a selected service is deployed responsive to receiving an undeployment trigger.

Moreover, these elements missing from Chen are not "inherent" as asserted by the Office Action. Elements of inherency from the Manual Of Patent Examining Procedure (MPEP) are set forth below:

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"To establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.' "In re Robertson, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999) (citations omitted). ...
"In relying upon the theory of inherency, the examiner must provide a basis in fact and/or technical reasoning to reasonably support the determination that the allegedly inherent characteristic necessarily flows from the teachings of the applied prior art." Ex parte Levy, 17 USPQ2d 1461, 1464 (Bd. Pat. App. & Inter. 1990) (emphasis in original). ...

MPEP, Sec. 2112(IV). Determining one or more locations where a selected service is deployed does not necessarily flow from the teachings of Chen as required by the MPEP.

Moreover, Chen fails to teach or suggest effecting dynamic undeployment responsive to receiving an undeployment trigger. As discussed with respect to the action code field 802 of the BGP capability message 800 of Chen, cited portions of Chen state that:

The capability action code contained in field 802 has the following defined values: (1) announce (i.e., add) a new capability; (2) replace a previously announced capability; and (3) withdraw (i.e., delete) a previously announced capability.

Chen, col. 6, lines 49-53. Even accepting for the sake of argument that withdrawing/deleting a previously announced capability effects a dynamic undeployment, Chen fails to teach or suggest effecting a dynamic undeployment responsive to receiving an undeployment trigger. More particularly, Chen fails to teach or suggest withdrawing/deleting a previously announced capability (discussed at Chen, col. 6, lines 49-55 and cited by the Office Action as effecting a dynamic undeployment) responsive to sending an "OPEN message" (discussed at Chen col. 5, lines 20-30 and cited by the Office Action as receiving an undeployment trigger).

For at least the reasons discussed above, the Applicants respectfully submit that amended Claim 25 is patentable over Chen. The Applicants further submit that amended Claims 48 and 50 are patentable for reasons similar to those discussed above with respect to Claim 25. In addition, dependent Claims 26 and 28-47 are patentable at least as per the patentability of Claims 25, 48, and 50 from which they depend.

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Claim 25 has also been rejected under 35 U.S.C. Sec. 103(a) as being unpatentable over Chen in view of U.S. Patent No. 5,983,281 to Ogle et al. ("Ogle"). Office Action, page 15. The Office Action, however, does not cite Ogle with respect to any recitations of Claim 25. (The Office Action only discusses Ogle with respect to recitations of Claim 28.) Accordingly, Claim 25 is patentable over the combination of Chen and Ogle for at least the reasons discussed above with respect to Chen.

# Dependent Claims 26, 32, 35-39, and 45-47 Are Patentable Over Chen In View Of Khello

Dependent Claims 26, 32, 35-39, and 45-47 have been rejected under 35 U.S.C. Sec. 103(a) as being unpatentable over Chen in view of U.S. Patent No. 5,657,451 to Khello ("Khello"). These claims are patentable at least as per the patentability of Claims 25, 48, and 50 from which they depend. The Applicants further submit that these claims are patentable over the combination of Chen and Khello for at least the additional reasons discussed below.

As discussed in the Manual Of Patent Examining Procedure (MPEP), three basic criteria must be met to establish a *prima facie* case of obviousness. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. Moreover, the teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. *See*, MPEP, Sec. 2143.

Regarding all of Claims 26, 32, 35-39, and 45-47, there is no suggestion, teaching, or motivation in either Chen or Khello to combine Chen and Khello to somehow teach or suggest the methods of dynamically undeploying web services in a computing network as recited in Claims 26, 32, 35-39, and 45-47. In discussing each of the rejections of Claims 26, 32, 35-39, and 45-47, the Office Action states that:

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it would have been obvious at the time of the invention for an artisan of ordinary skill in the art to combine the system taught by Chen with the internetworking system disclosed by Khello.

Office Action, pages 9-12. Chen, however, relates to "routing protocols in a computer network" (see Chen, col. 1, lines 9-10, underline added) while Khello discusses a generic coordination mechanism that "solves feasible service interaction problems taking into account real-time processing constraints within telecommunications networks" (see Khello, Abstract, underline added). More particularly, Khello discusses "limiting service interaction complexity within an active basic call" (see, Khello, Abstract), and it would not be obvious to combine aspects of service of an active basic call in a telecommunications network as discussed in Khello with aspects of a routing protocol in a computer network as discussed in Chen. Accordingly, there is no suggestion, teaching, or motivation in either Chen or Khello to combine Chen and Khello as suggested in the Office Action, and dependent Claims 26, 32, 35-39, and 45-47 are thus separately patentable over the cited art for at least these additional reasons.

In addition, even if Chen and Khello are somehow combined, the references, when combined, fail to teach or suggest all the claim limitations of Claims 26, 32, 35-39, and 45-47 as required by MPEP, Sec. 2143. Regarding Claim 32, for example, the Office Action concedes that:

Chen is silent as to "wherein the usage is an average number of client requests for the selected service within a predetermined time interval." However, Khello does. (See col. 6, lines 1-3).

Office Action, page 8. The cited portion of Khello states that:

Statistics maintenance. The mechanism maintains enhanced statistics measurements on service operations in the network.

Khello, col. 6, lines 1-3. Nothing in Khello, however, teaches or suggests that the "enhanced statistics measurements" includes an average number of client requests for a selected service within a predetermined time interval" as recited in Claim 32.

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Regarding Claims 35 and 36 (both of which depend from Claim 33), the Office Action concedes that:

Chen is silent as to "wherein a value of the predetermined threshold applies to a plurality of deployed services." However, Khello does. (See col. 5, lines 52-54).

Office Action, page 8. The Office Action also concedes that:

Chen is silent as to "wherein the predetermined threshold applies individually to the selected service." However, Khello does (See col. 5, lines 52-54).

Office Action, page 8. The cited portion of Khello states that:

Consistent service provisioning. The mechanism does not allow a service to be provided unless the subscriber and the service characteristic are compatible.

Khello, col. 5, lines 52-54. Accordingly, Khello also fails to teach or suggest a threshold used to determine when to send an undeployment trigger (as recited in Claim 33 from which Claims 35 and 36 depend), much less a threshold applied to a plurality of deployed services as recited in Claim 35 or a threshold applied individually to a selected service as recited in Claim 36.

In addition, each of Claims 35-39 depends from Claim 33, and each of Claim 35-39 includes all recitations of Claim 33. The Office Action, however, concedes that:

Chen and Khello do not explicitly disclose "further comprising comparing the usage of the selected service to a predetermined threshold, and sending the undeployment trigger when the usage falls below the predetermined threshold."

Office Action, pages 11-12. Accordingly, Claims 35-39 are separately patentable over the combination of Chen and Khello for at least these additional reasons.

## Claims 29, 33-34, And 40-44 Are Patentable Over Chen, Khello, And Reifer

Claims 29, 33-34, and 40-44 have been rejected under 35 U.S.C. Sec. 103(a) as being unpatentable over Chen in view of Khello in further view of U.S. Patent No. 6,421,727 to Reifer et al. ("Reifer"). These claims are patentable at least as per the patentability of Claims 25, 48, and 50 from which they depend. The Applicants further submit that these claims are separately

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patentable over the combination of Chen and Khello for at least the additional reasons discussed below.

As discussed above with respect to Claims 26, 32, 35-39, and 45-47, there is no suggestion, teaching, or motivation in either Chen or Khello to combine Chen and Khello to somehow teach or suggest the methods of dynamically undeploying web services in a computing network. Briefly, it would not be obvious to combine aspects of the computer network of Chen with the telecommunications networks of Khello to teach or suggest methods of dynamically undeploying web services in a computing network as recited in the claims of the present invention. For similar reasons, it would not be obvious to combine the "systems for operating and managing a telecommunications network" of Reifer (see, Reifer, col. 1, lines 6-9, underline added) with Chen and Khello to teach or suggest a method of dynamically undeploying web services in a computing network. Accordingly, there is no suggestion, teaching, or motivation in either Chen, Khello, and/or Reifer to combine Chen, Khello, and Reifer as suggested in the Office Action, and dependent Claims 29, 33-34, and 40-44 are thus separately patentable over the cited art.

In addition, even if Chen, Khello, and Reifer are somehow combined, the references, when combined, fail to teach or suggest all the claim limitations of Claims 29, 33-34, and 40-44 as required by MPEP, Sec. 2143. Regarding Claim 33, for example, the Office Action states that:

Chen and Khello do not explicitly disclose "futher comprising comparing the usage of the selected service to a predetermined threshold, and sending the undeployment trigger when the usage falls below the predetermined threshold."

However, Reifer teaches usage comparison at col. 5, lines 13-16.

The cited portions of Reifer state that:

FIG. 5 illustrates in more detail the processes of the business subsystems of the preferred embodiment of the business system 400 in the usage management of the telecommunications network 100, including the BSS 430.

Reifer, col. 5, lines 13-17. Reifer thus fails to provide the missing teachings relating to comparing usage of a selected service to a predetermined threshold, and/or sending an

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undeployment trigger when the usage falls below the predetermined threshold as recited in Claim 33.

#### CONCLUSION

Accordingly, the Applicants submit that all pending claims in the present application are in condition for allowance, and allowance of all claims is respectfully requested in due course.

Respectfully submitted,

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PATENT



Attorney Docket No. 5577-319

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re: Peter J. Brittenham et al; Application No.: 09/864,607

o.: 09/864,607 Group Art Unit: 2157
May 23, 2001 Examiner: Emmanuel Coffy

Filed: May 23, 2001 Examiner. Entitlet of For: DYNAMIC UNDEPLOYMENT OF SERVICES IN A COMPUTING

NETWORK

Date: March 10, 2006

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2006.

Joyce Paoli

INFORMATION DISCLOSURE STATEMENT PURSUANT TO 37 C.F.R. §1.97(c)

Sir:

Attached is a list of documents on Form PTO-1449, together with a copy of any listed foreign patent document and/or non-patent literature. A copy of any listed U.S. patent and/or U.S. patent application publication is not provided herewith in accordance with the amendment by the U.S. Patent and Trademark Office to 37 C.F.R. § 1.98(a)(2)(ii) effective October 21, 2004.

This Information Disclosure Statement is submitted in accordance with 37 C.F.R. § 1.97(c), before final Office Action or Allowance, whichever is earlier.

In accordance with the requirements of 37 C.F.R. § 1.97(c)(1), the following Certification as specified in 37 C.F.R. § 1.97(e) is made:

In accordance with the requirements of 37 C.F.R. § 1.97(c)(2), a check for the \$180.00 fee specified in 37 C.F.R. § 1.17(p) is enclosed. This amount is believed to be correct. However, the Commissioner is authorized to charge any deficiency or credit any overpayment to Deposit Account No. 09-0461.

03/15/2006 LWONDIM1 0000000f 090461 09864607

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It is requested that these documents be considered by the Examiner and officially made of record in accordance with the provisions of 37 C.F.R. §1.56 and Section 609 of the MPEP.

Respectfully submitted,

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STATEMENT BY APPLICANT MAR I	3 2006 First Named Inventor	Peter J. Brittenham
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(use as many sheets as necessary)	Examiner Name	Emmanuel Coffy
Sheet 1 of 1	Attorney Docket Number	5577-319

	·		U.S. PATENTS	AND PATENT PUBLICATIONS	
Examiner Initials*	Cite No.	U.S. Patent Document		Name of Patentee or Applicant of Cited	Date of Publication of Cited
		Number	Kind Code (if known)	Document	Document MM-DD-YYYY
	1.	US-6,363,411		Dugan et al;.	03/2002
	2.	US-6,857,012		Sim et al;	02/2005
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.